

CLAIMS

What is claimed is:

1. A probe and connector assembly for use in a socketless
5 fixture and for providing electrical contact with electrical
circuits during testing thereof, said assembly comprising:

a probe comprising:

an electrically conductive tubular housing;

10 an electrically conductive plunger captively disposed
in the electrically conductive tubular housing in
electrically conductive contact therewith and having a
circuit contacting tip urged outward from the housing
under the force of a longitudinally compressed coil
spring;

15 said tubular housing having a first end portion
through which the plunger extends to the tip and by
which the plunger is retained in the housing and a
second end defining an opening; and

an electrically conductive connector comprising:

20 a pin end sized to achieve an interference fit
with said housing second end when disposed within said
opening, said end pin providing electrically conductive
connection between the connector and the probe when
disposed within said opening; and

25 a termination end having a wire jack receptacle
for pluggably receiving a wire jack pin.

2. The assembly of claim 1 wherein said connector
includes at its termination end a tubular portion adapted to
30 receive the wire jack pin with an interference fit.

3. The assembly of claim 1 wherein the connector has an annular barb formed on the exterior thereof to provide captive mounting in an opening within a fixture plate.

4. The assembly of claim 1 wherein said connector has a cylindrical portion attached to said pin and said cylindrical body portion includes two annular externally extending beads for retaining said connector via a press fit in an opening within a fixture plate.

5. The assembly of claim 1 wherein said connector includes a tapered portion of increasing diameter extending between said pin end and said body, said connector and probe forming a seal when the pin is disposed in assembled relation within said opening defined by said second end with said second end in circumferential abutting relation with said tapered portion of said connector.

6. The assembly of claim 2 wherein the tubular portion of the connector comprises a crimp portion to receive the wire jack pin with an interference fit.

7. The assembly of claim 6 wherein the crimp portion includes slots through the wall of the tubular portion to provide a crimped non-circular cross section for interference fit of an inserted wire jack pin.

8. The assembly of claim 2 wherein the tubular portion includes one or more detents extending inward in the tubular portion to provide an interference fit with an inserted wire jack pin.

9. For use in a test probe assembly of a socketless
fixture and for providing electrical contact with electrical
circuits during testing thereof, an electrically conductive
5 connector comprising:

a cylindrical body portion having at least one annular
externally extending bead for retaining said connector in an
opening within a fixture plate;

said body portion having a pin end sized to achieve an
10 interference fit with a receptacle end of a test probe, said
end pin providing electrically conductive connection between
the connector and the test probe; and

said body portion having a termination end having a
wire jack receptacle for pluggably receiving a wire jack
15 pin.

10. The connector of claim 9 wherein the termination end of
the body portion includes a tubular crimp portion adapted to
receive the wire jack pin with an interference fit.

20 11. The connector of claim 9 wherein said body portion
includes a tapered portion of increasing diameter extending
between said pin end and said body.

25 12. The connector of claim 9 wherein the wire jack
receptacle of the connector includes a crimp portion to
receive the wire jack pin with an interference fit.

30 13. The connector of claim 12 wherein the crimp portion has
slots through the walls of the receptacle to provide a

crimped non-circular cross section for receiving the wire jack pin with an interference fit.

14. The connector of claim 9 wherein the wire jack
5 receptacle includes one or more detents extending inwardly into the receptacle to receive the wire jack pin with an interference fit.

15. The connector of claim 14 wherein the receptacle
10 includes a blind hole in the termination end and three detents equispaced about the circumference of the receptacle and an opening through the wall of the termination end near the blind end of the blind hole to facilitate the flow of a plating solution during plating of the receptacle.

15